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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/808,340 | 03/25/2004 | Masato Ishihara | 01-614 | 5442 |
| 23400 | 7590 | 10/14/2005 | EXAMINER | |
| POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191 | | | AURORA, REENA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2862 | |

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,340

Applicant(s)

ISHIHARA ET AL.

Examiner

Reena Aurora

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 3 and 6 - 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 3 and 6 - 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Bot Ledyrn
Primary Examiner

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/13/05.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to amendment received on 09/13/05.

The applicant has canceled claims 4 and 5 and has added claims 6 and 7.

Claims 1 – 3 and 6 – 7 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3 and 6 - 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Uenoyama (6,366,079).

As to claim 1, Uenoyama discloses a magnetic sensor including a first magneto-resistive bridge (10, fig. 5A and 5B) constructed by a plurality of magneto-resistive elements (12a, 12b, 13a, 13b) for detecting variation of bias magnetic field (col. 2, lines 15 – 18 and col. 4, lines 39 - 43); and a second magneto-resistive bridge (11) constructed by a plurality of magneto-resistive elements (14a, 14b, 15a, 15b) for detecting variation of the bias magnetic field, wherein the first magneto-resistive bridge (10) and the second magneto-resistive bridge (11) are disposed to be symmetrical to each other with respect to a direction of the magnetic field (7), wherein the plurality of magneto-resistive bridge elements constituting the first magneto-resistive bridge are disposed to be symmetrical (col. 3, lines 49 - 53) with one another with respect to the

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direction of the bias magnetic field (7, fig. 2A and 5A), and wherein the plurality of magneto-resistive elements constituting the second magneto-resistive bridge (14a, 14b, 15a, 15b) are disposed to be symmetrical with one another with respect to the direction of the bias magnetic field (7); each of the first (10) and second (11) magneto-resistive bridges comprises four radially disposed magneto-resistive elements (12a, 12b, 13a, 13b; 14a, 14b, 15a, 15b, fig. 5A), wherein the magneto-resistive elements of the plurality of magneto-resistive elements include pairs of confronting magneto-resistive elements (12a, 12b and 13a, 13b), and wherein a middle point potential ($V_{\text{sub a}}$) of each pair of magneto-resistive elements is set as an output of each magneto-resistive bridge (10, 11).; and the magneto-resistive elements of each pair (12a, 12b and 13a, 13b) are arranged to form a line (fig. 5A and 5B).

As to claim 2, Uenoyama further discloses that the plurality of magneto-resistive elements (12a, 12b, 13a, 13b; 14a, 14b, 15a, 15b, fig. 5A) of the first (10) or second magneto-resistive bridge (11) are radially disposed (fig. 5A, col. 6, lines 52 - 65).

As to claim 3, Uenoyama further discloses that all of the plurality of magneto-resistive elements (12a, 12b, 13a, 13b; 14a, 14b, 15a, 15b, fig. 5A) of the first (10) and second (11) magneto-resistive bridge are disposed to have a fixed angle with respect to the direction of the magnetic field (7) (col. 3, line 65 – col. 4, line 19).

As to claim 6, Uenoyama further discloses that the pair of magneto resistive elements form an X-shape (12a, 12b; 13a, 13b).

As to claim 7, Uenoyama further discloses that the magneto resistive elements of each pair are aligned with one another to form a single straight line (12a, 12b and 13a, 13b), (fig. 5A and 5B).

Response to Arguments

Applicant's arguments filed on 09/13/05 have been fully considered but they are not persuasive. Applicant's argument: The magneto-resistive elements of Uenoyama are not disposed linearly. Response: Uenoyama clearly discloses that the magneto-resistive elements are disposed linearly (Note fig. 5A and 5B).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Reena Aurora


Bot Ledyne
Primary Examiner